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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/800,743	03/08/2001	John McCormack	EDGE001/01US	5719

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GLENN PATENT GROUP
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EXAMINER

MATTIS, JASON E

ART UNIT

PAPER NUMBER

2616

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Office Action Summary	Application No. 09/800,743	Applicant(s) MCCORMACK ET AL.	
	Examiner Jason E. Mattis	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/6/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11,12,15-21 and 23-27 is/are pending in the application.
- 4a) Of the above claim(s) 11,12,15-21 and 23-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26 and 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to the Amendment filed 12/6/06. Due to the amendment, the previous rejections of claims 26 and 27 under 35 U.S.C. 112 first and second paragraphs have been withdrawn. Claims 11-12, 15-21, and 23-25 have been withdrawn from consideration. Claims 11-12, 15-21, and 23-27 are currently pending in the application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 26 is rejected under 35 U.S.C. 102(e) as being anticipated by Wu (U.S. Pat. 6665301 B1).

With respect to claim 26, Wu discloses a method for providing a quality of service-based packet switched network to effect Internet telephony and other forms of communication (See column 3 lines 26-40, column 5 line 47 to column 6 line 7, and **Figures 1 and 3 of Wu for reference to providing a quality of serviced-based packet switched network 10 to effect voice-over IP transmission and other forms**

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of communication). Wu also discloses providing a multi-protocol convergence switch from enabling an endpoint to connect to any other endpoint within the network through the Internet **(See column 3 line 57 to column 4 line 9 and Figure 1 of Wu for reference to system 10 including a private boundary node 30 (Node A), which is a MPCS, enabling an endpoint to connect to any endpoint within the system 10 through the Internet).** Wu further discloses a virtual circuit from an originating endpoint to an ingress MPCS, a virtual private network between two or more MPCSs, and a virtual circuit from an egress MPCS to a destination endpoint with the VCs being comprised of any protocol **(See column 4 lines 10-39 and Figure 1 of Wu for reference to a first virtual circuit 56 that connects an endpoint to Node A, which is an ingress MPCS, for reference to a virtual private network between Nodes A, Node B, Intermediate Node, Node C, and Node D, and for reference to a second virtual circuit 56 that connects Node D, which is an egress MPCS, to a destination endpoint with the VCs 56 inherently using a protocol).** Wu also discloses the VPN comprising one or more virtual trunks with each VT connecting two MPCSs **(See column 4 lines 10-39 and Figure 1 of Wu for reference to the VPN comprising virtual tunnels 50, which are virtual trunks, connecting two nodes with each virtual tunnel inherently using a protocol).** Wu further discloses that the VTs differ from each other in quantity of reserved bandwidth **(See column 6 lines 8-19, column 6 lines 50-67 and Figure 3 of Wu for reference to various virtual tunnels 116 having different transmission rates, and thus bandwidth limitations, reserved).** Wu also discloses that the VPN exists independently of the VCs in time **(See column 4 lines 10-**

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39 and Figure 1 of Wu for reference to the VPN and its virtual tunnels 50 existing independent of the virtual circuits 56 such that the existence of the virtual tunnels 50 does not affect the existence of the virtual circuits 56). Wu further discloses connecting originating and destination endpoints by sending a telephone call to a telephone's associated MPCS via a VC (**See column 11 lines 9-17 and Figure 7 of Wu for reference to a Node A receiving call data via a VC from an endpoint).** Wu also discloses the ingress MPCS determining on which VT the call should be routed based on required bandwidth (**See column 6 lines 37-49 of Wu for reference to the Node A determining which virtual tunnel to use based on the current bandwidth limitations of the virtual tunnels such that the transmission rates allocated to the tunnels are not exceeded).** Wu further discloses sending the call through the VPN via a selected VT to a destination egress MPCS (**See column 11 lines 31-45 and Figure 7 of Wu for reference to transmitting scheduled traffic in a selected VT to a termination Node).** Wu also discloses sending the call to a destination telephone through a VC associated with the destination telephone (**See column 11 lines 31-45 of Wu for reference to separating the call data from the virtual tunnel and sending it to a destination via a VC connected to the destination).** Wu further discloses the MPCS straddling a core network comprising the VPN and an edge network comprising VCs (**See column 3 line 57 to column 4 line 9 and Figure 1 of Wu for reference to Node A straddling a core network 12 comprising the VPN and an edge network 14 comprising the VCs).** Wu also discloses recognizing communications quality and delivery requirements for class of services and choosing a form of transport based on

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class of service comprising the ATM protocol (**See column 3 line 57 to column 4 line 9, column 5 line 47 to column 6 line 7, and column 11 lines 31-45 of Wu for reference to recognizing quality of service requirements and choosing an ATM transport from based on the QoS requirements**).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wu in view of Roy (U.S. Pat. 6049531) and Yang (U.S. Application 10/706730).

With respect to claim 27, Wu discloses converting data from the edge network VC protocol to the core network VT protocol and vice versa if necessary (**See column 11 lines 9-45 of Wu for reference to converting between VC and virtual tunnel protocol formats**). Wu also discloses enabling provisioning of the core network of VTs set up in advance and independent of any edge network VCs (See column 4 lines 10-39 and Figure 1 of Wu for reference to the virtual tunnels 50 of the VPN being set up independently from the virtual circuits 56 of the edge networks such that they are enabled to be managed independently without affecting each other). Wu does not

disclose converting data from IP to AAL2 and vice versa. Wu further does not disclose performing interstripping on IP traffic.

With respect to claim 27, Roy, in the field of communications, discloses converting telephone call data between an IP network and an AAL2 network (**See column 9 line 59 to column 10 line 51 of Roy for reference to converting IP data into ATM cells using ATM adaptation layer protocol before transferring the data**). Converting data between an IP network and an AAL2 network has the advantage of allowing telephone data to travel from an IP network to an ATM network, which is more like a circuit switched network, to provide a better quality of service for the real time telephone call data.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Roy, to combine converting data between an IP network and an AAL2 network, as suggested by Roy, with the Internet telephony method of Wu, with the motivation being to allow allowing telephone data to travel from an IP network to an ATM network, which is more like a circuit switched network, to provide a better quality of service for the real time telephone call data.

With respect to claim 27, Yang, in the field of communications, discloses a network that strips off RTP/UDP/IP headers from packets before transferring them over an ATM network (**See page 4 paragraph 90 to page 5 paragraph 103 and Figure 4B of Yang for reference to forming compressing a packet by completely removing IP/UDP/RTP headers before sending a packet over an ATM network and routing the packet to an ATM egress switch**). Yang also discloses adding IP/UDP/RTP

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headers back onto a packet after a packet has been received at an egress of an ATM network and before sending the packet to an IP network (**See page 5 paragraphs 107-108 and Figure 4B of Yang for reference to decompressing a packet by adding an IP/UDP/RTP header on the packet after it is received at an edge switch to an IP network**). Stripping a header before sending it over an ATM network and adding it back on at an egress switch of an ATM network has the advantage of providing a higher compressing gain while saving resources, as suggested by Yang (**See page 2 paragraph 49 of Yang for reference to this advantage**).

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Yang, to stripping a header before sending it over an ATM network and adding it back on at an egress switch, as suggested by Yang, with the Internet telephony method of Wu and Roy, with the motivation being to provide a higher compressing gain while saving resources.

Response to Arguments

6. Applicant's arguments with respect to claims 26 and 27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason E. Mattis whose telephone number is (571) 272-3154. The examiner can normally be reached on M-F 8AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jem

A handwritten signature in black ink, appearing to read 'Huy D. Vu', followed by a long horizontal line extending to the right.

HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600